Philosophical Think Tanks

Alexander T. Englert Princeton University

Abstract

While small group discussion is invaluable to the philosophy classroom, I think it can be improved. In this paper I present a method that I have developed to better facilitate active learning in the spirit of a philosopher within a Socratic community. My method is to form what I call a "philosophical think tank," which takes the form of a small group that persists for the duration of the semester (or a large portion of it) in order to overcome deficiencies that can arise if groups are determined anew with each class meeting. After presenting the technique, I offer an overview of results, possible issues, and ideas for future development.

Introduction

Small group discussions represent a popular pedagogical approach in the philosophy classroom for obvious reasons. They break up lecture; provide opportunities for students to speak freely in a low-pressure environment where the professor – as a proverbial Big Brother – is *not* watching; and capture the spirit of Socratic dialogue in an intimate setting. While an unwavering proponent of small group discussions, I think that they can do more in philosophy classrooms as a source of active learning. The aim of this paper is to present a method of facilitating small group discussions that helps them reach their full potential. It involves forming groups that I have playfully named, "philosophical think tanks," which persist for the whole semester (or large portions of it). The goal of these diachronically

constant groups is to overcome two problems that might inhibit small group discussions from achieving the Socratic paradigm. The first problem arises from the often rushed and hectic nature in which they are formed (and interrupted); the second arises from the manner that they can often provide a space to dodge meaningful engagement with diverse points of view.

Beyond gathering qualitative comments left by students on course evaluations and in direct conversations, I have created an optional, anonymous survey to begin collecting student feedback data about their experience with philosophical think tanks. So far, the quantitative results of this feedback tool indicate that it better enables dialogue between students over the course of the semester.

In the first part of my paper, I explain briefly the motivations that led me to develop this form of small group based on two problems. In part two, I detail the form of philosophical think tanks and explain the way they should address these problems. In part three, I give concrete examples of the formation and sort of activities that one can employ. In the final part, I provide qualitative and quantitative student feedback. I end by discussing areas of possible concern along with ways that the method could be improved in the future.

1. The Socratic Paradigm and Two Problems with Haphazard Small Groups

While by no means the exclusive property of philosophy as a discipline, one could say that philosophy in the Western tradition trademarked the small group dialogue. Socratic dialogues are often both the introduction to philosophy as a discipline as well as emblematic of the philosophical method itself. Yet, two issues can derail it from reaching its full potential within the modern academic context.

1.1. The Socratic Dialogue as a Paradigm of Active Learning

When Plato in *Protagoras* describes the scene that Socrates observes when visiting the eponymous sophist, the opposite of a small, intimate group discussion takes shape. As Protagoras paces through the courtyard, his followers parade behind him and part before him so as to not interrupt his train of thought while he delivers his lecture: a literal sage on the stage. Much of the ensuing dialogue examines the tension between Protagoras' preferred method of philosophy – i.e., long, uninterrupted speeches – and Socrates' – i.e., intimate and quick back-and-forth discussions: "I will talk with you [Protagoras] another time, when you are willing to converse so that I can follow you. [...] How can we have a discussion otherwise? Personally I thought that companionable talk was one thing, and public speaking another."ⁱ While lecture-style delivery of information certainly still has its proponents today, small group discussion as a form of "cooperative learning" with its Socratic roots continues to prove its effectiveness for student learning.ⁱⁱ.

This effectiveness, I think, is because small group discussions in the Socratic form – i.e., as a quick, conversational back-and-forth – provide active experiences for learning philosophy. Active learning – in the words of Fink (2013) – seeks to do the following: "Whatever it is that you want students to learn how to do, that is what they need to be doing during the course."ⁱⁱⁱ And one of the keys to facilitating such active learning is the creation of "experiences,"^{iv} in which one does what (in our case) philosophers actually do. Whether in writing journal papers as a form of silent discourse, presenting at conferences with concomitant Q&A, or holding philosophical workshops, to philosophize – one could summarize – is to immerse oneself in ongoing Socratic dialogues characterized by exchange between diverse perspectives.

Beyond a means for learning to philosophize, effective small group discussions are equally valuable as opportunities to produce "intentional learners" in the philosophy classroom, or learners who are "autonomous or self-directed learners."^v By trusting students to complete projects on their own and in groups, they receive space to take ownership of their own investigations. As Cholbi (2007) writes, teaching objectives to create intentional learners aim to facilitate the "skills, expectations, and attitudes toward learning itself that students are to develop."^{vi} Yet, Cholbi points out that in-class discussion is precisely a point in which intentional learning is often undercut because, "students often do not appreciate what learning goals are served by in-class discussion and what role their participation plays in meeting these goals. [...] [And] instructors are often not sufficiently intentional about the use of discussion."^{vii} If one does not make explicit what learning objectives are associated with in-class discussion, Cholbi thinks there is a danger of students finding the structure of such discussions "aimless."^{viii} And it is precisely this aimless result that I think often plagues modern small group discussions due to a haphazard, ad hoc implementation of them, which in turn impedes active learning.

That is, despite the potential of small group work to provide active learning opportunities and create intentional learners, this potential can easily remain unrealized and become instead a slapdash or flaccid affair. Often, small group discussion begins with the professor saying something like: "Get together with a neighbor and discuss what you think about Socrates' idea that death is nothing to be feared." Or worse: "Get together with someone and talk about the reading." The former, albeit well-intended, begins a fleeting, soon-to-be interrupted chat that students might take seriously in the best-case scenario. The latter, vague declaration or a similarly under-prepared prompt most likely leads – in the words of Nilson (2010) – "into a free-association, free-for-all bull session"^{ix} or a chance to

discuss the new hot show on Netflix. Rather than an opportunity to *philosophize* actively, the small group too often becomes a stopgap so that professors can provide variety or sit back, while students allow their attention to relax.^x

In light of all the ways that small group discussions fail to live up to their potential or go astray, how can the instructor facilitate a thriving small group discussion? What underlying problems might cause these unfortunate results, namely, of small groups marked by passivity and aimlessness as opposed to active engagement and intentionality? Naturally, good lesson planning, compelling prompts, and engaging activities remain essential for effective teaching whether small group discussions take place or not. And no small group discussion will succeed if the lesson plan is subpar or boring. In this paper, though, I am bracketing and setting aside all these important elements of successful pedagogy to focus instead on how one can better facilitate small group discussion by focusing on the form alone. That is, how can we approach the implementation of small groups to make them the most effective vehicles possible for our carefully crafted lessons?

1.2. Two Problems with Small Group Discussions in Today's Classrooms

When comparing the Socratic dialogues with modern iterations of small group discussion, two underlying problems – I contend – often hinder them from approximating the sort of robust philosophical discourse that would provide active learning opportunities and create intentional learners. The first, I refer to as the Lack of Continuity Problem, and the second as the Lack of Other Problem. By these, I mean the following:

> Lack of Continuity Problem: Discussions in small groups are arbitrarily timed and cut short (either by the instructor's judgment or the stop time of the class).

> > 5

Lack of Other Problem: Discussions in small groups provide the opportunity to find like-minded, familiar people in order to dodge active, conscientious engagement with the topic through dialogue with diverse perspectives.

In regards to the Lack of Continuity Problem, the well-intended but unstructured execution of the small group discussions robs them of what I will refer to as continuity. By "continuity," I mean a duration of structured, useable time that extends beyond any one small group discussion segment to fill the whole semester. It might strike one as counterintuitive, but the time we as instructors make for our students to discuss – or the timing of discussion in class – often presents a barrier to learning. Of course, it *seems* as if time is precisely what we give whenever we facilitate small group discussions. The students are given time to talk about an interesting topic. Yet no matter how conscientiously the instructor attempts to manage class time, the small group set-up can be woefully far from what one desires even if one has provided excellent material and stimulating prompts.

The main issue that leads to the Lack of Continuity Problem is an arbitrary termination of the discussion by the instructor or the ending of class without setting up the potential for the discussion to find conclusion or transfer into future discussions. After time is up, the group breaks up and the topic changes without the dialogue having a chance to reach a natural ending on its own. What was said may or may not have an immediate bridge to the future trajectory of the course. And even if it does, who is to say that future groups discussing some related topic will draw the necessary connections since there is no continuity in the group structure itself? The danger is that this arbitrary determination threatens the motivation of those involved in the discussion. Adequate continuity, by contrast, would give one the sense that an ongoing conversation is (or can be) in the offing because the conversation has a chance to continue or be revived if required.

As for the Lack of Other Problem, the common use of small-group discussion often falls short of providing the chance to exchange with others who present diverse points of view. By "other," I don't mean simply another person, but rather a person with whom one is not absolutely familiar and whose point of view is unexplored. Though Socrates in his dialogues often knows a handful of his interlocutors, he is also constantly running into people of whom he is aware, but with whom he is not actually formally acquainted. And it is these people who really spur the conversation forward because they are often the ones who challenge Socrates rather than placate or praise him. What would the Republic be without Thrasymachus' diatribe against Socrates and speech in favor of might makes right? Even if philosophically weaker in this case, the *other* as a completely different perspective offers the necessary counterpoint to get an energetic conversation going. And as John Stuart Mill points out, even if we are convinced that our opinions are true, we should nevertheless desire that they find challengers, for "if [a strongly held opinion] is not fully, frequently, and fearlessly discussed, it will be held as a dead dogma, not a living truth."x Since friends too often offer an opportunity to take the easy way out from a tough line of questioning by instead moving onto easier, unrelated matters, it is important to create a space in which we test our views with others who are not likeminded.

Of course, for the instructor the processes of group formation via the "turn to your neighbor" or the "counting off" approaches make sense from a practical point of view.^{xii} To curate small groups for every class would constitute a great burden of busy work for an already overworked instructor. So, why not take the easy way out?

7

Such understandable efficiency poses a threat to facilitating the interactions that small group discussions should ideally produce: namely, fruitful exchange to reveal the complexity of issues, points of views, and the necessity for open dialogue with those who might disagree with you. Brookfield and Preskill's (2005) list of 15 outcomes that can arise from successful small group discussions, for example, almost all highlight the manner that small group discussion promotes the sharing of and training of tolerance for a diversity of views. To name a few from their list, take for example: "1. It helps students explore a diversity of perspectives," "2. It increases students' awareness of and tolerance for ambiguity or complexity," "5. It develops new appreciation for continuing differences," "9. It helps students learn the process and habits of democratic discourse," and "13. It increases breadth and makes students more empathetic."ⁱⁿⁱⁱⁱ Too often though small groups provide a shelter from other views by allowing students to huddle together with their likeminded compatriots and roommates. Socrates in dialogue – even when approached by friends – never shied away from the challenge of appreciating how the world looked from the other's point of view.

It was in working through how one might create a thriving Socratic dialogue by means of small group discussions that simultaneously get around both of these problems that I came up with the form of philosophical think tanks.

2. The Form of a Philosophical Think Tank

In this section, I detail the idea behind the philosophical think tank and how its form should help avoid the two problems that can encumber small group discussions from becoming a paradigm of active and intentional learning. I will detail in the subsequent section the actual steps and concrete examples of what this looks like in practice.

2.1. The Basic Idea of Philosophical Think Tanks

The basic idea arose as I sought to address the two problems just discussed. In reflecting on the Socratic origins of philosophical dialogue, I wanted to find a way to interconnect the discussions of small groups diachronically throughout the semester (aimed at the Lack of Continuity Problem), and to ensure that diverse voices came together in small group discussions (aimed at the Lack of Other Problem). To address these issues and create a tool for active learning in the classroom, the form of a philosophical think tank took shape as a small group with three main features. A philosophical think tank would, namely, be characterized in that it:

(a) persists as a learning cohort for half of or the whole semester;

(b) acts to arrange seating (regardless of space, which I cover in the next section);

(c) is randomly created by the instructor.

Via these three features, the philosophical think tank should provide a manner for both creating a transfer between courses so that the dialogue need not be terminated arbitrarily (via (a)) and create cohorts that persist and nurture conversation between a diversity of views (via (b) and (c)).

2.2. The Form of Philosophical Think Tanks

I now would like to illustrate how the form of philosophical think tanks takes shape to address the problems noted above. Looking to my own experiences, the Lack of Continuity Problem seemed best addressed by providing a way for the dialogue to continue beyond any one class or any one small group discussion time. Ideally, of course, the students (even in introductory courses) would gather together in the commons and continue discussing what they did in class. The dream of any philosophy instructor is to inspire students to continue debating whether ethical egoism holds while they drink their cheap beer in fraternity lounges or on the campus lawns, i.e., to inspire students to enact something akin to Plato's symposia. However, as the instructor, this ideal remains for obvious reasons outside our control. Thus, to provide for continuity of the small group community throughout the whole semester I decided to create cohorts that persist beyond any one arbitrary slice of class time.^{xiv}

With small groups that persisted for the whole semester or large chunks of it, I hoped, that students might have more opportunity to return to old topics, remember previous points, and connect new ideas with a more diachronic group life. I saw this as a way of further facilitating what is referred to by Bransford et al. (2000) as "transfer" or "the ability to extend what has been learned in one context to new contexts. [...] The instructor hopes that students will transfer learning from one problem to another within a course."^{xv} I wanted students not merely to memorize the material but actually use arguments from previous class periods in later discussions on new material and vice versa. Since everyone within a philosophical think tank is part of the same group with its collaborative ongoing efforts, there would be a sort of collective experience and memory that would allow common reference. Whereas if each small group discussion involved learning new names and faces or lacked any sort of permanent group structure, there would be significant obstructions in transferring knowledge from any one topic to another.

The Lack of Other Problem I found to be a bit tricky. On the one hand, Socrates often discusses with his close friends (though by no means exclusively). Also, often my own experiences with what I would term "ideal" small group experiences consisted of self-

selected groups of equally interested peers. And yet, my experience was that quite often the self-selected group in undergraduate contexts (primarily for beginning and intermediary courses) was a recipe for ensuring that conversations quickly go off topic. Even if Socrates starts off with friends, the dialogue only really gets going once someone challenges him. And in my own experiences with colleague instructors in philosophy, we were so committed to the purpose of the group that we never needed to worry about overly likemindedness in conversation. Since undergraduates are new to the subject, not necessarily committed to its objectives, and perhaps shy or lacking confidence, I wished to achieve a community of diverse voices that was also comfortable.

Of course, one would hope that all enrolled students share enough interest in the subject matter of the class such that motivation is not a serious problem. However, as an instructor, I feel, that one should be wary of trusting this hope. The self-selecting or, worse, "well, I know no one, so now I have to meet a stranger" options of the random small group formation provide a perfect opportunity for avoidance or shyness in engaging with another person as a new and hopefully challenging point of view.

My thought for creating an underlying form of continuing small groups also lent itself to solve this problem. By creating randomized small groups at the beginning of the semester, one could produce a small group that probably mixes friends, acquaintances, and strangers that would – with luck – avoid the problems associated with like-mindedness. Even if friends lucked out and found themselves in the same group, they couldn't discuss just anything because there would be others with whom they were not closely befriended. And the worry of the complete stranger awkwardness would be present at first, but would most likely be overcome as the semester progressed. An added and beneficial side effect of this would be that people could get to know others in their academic community, which would hopefully lead to an increase in participation by a diverse group of participants.^{xvi} All the while, the small group would be of a form in which other and diverse positions and experiences were inescapable.^{xvii} One would be in a group where like-mindedness or feelings of shyness could not derail active learning opportunities because the lack of *total* familiarity would maintain a certain formal adherence to the activities that I posed the groups. My rule of thumb regarding the size of these groups I took from Kant's obsessive-compulsive standard whenever he planned his dinner parties. To provide for the most conducive conversation he would never have less that three at the table (the number of the graces) and never more than nine (the number of the muses).

In sum, with the philosophical think tank I hoped to create active learning opportunities of the kind that inspired the use of the small group in the first place. I randomly formed small groups at the beginning of each semester in which the students would sit and work for half or the whole semester. To cement the groups, I formed them at the second or third meeting (to allow the class size to settle). I requested that the students sit with their groups for the remainder of the semester. This assigned seating aimed to help both establish the community in physical space for the whole of class period, as well as avoid making them rearrange themselves in media res. They would have their think tank and would immediately form it on arrival at class. In some classrooms, I actually had them at separate tables. In smaller settings or settings where chair arrangement was not possible, I had them sit together in clumps or on the same side of a table. When it came time for them to convene, I would ask them to circle together or create a space in which they were all facing each other in their respective groups. The longevity of the group would hopefully provide ample time for self-directed and transferencouraging inquiry within class since the groups would build a sort of collective presence and group memory (e.g., "Oh – right! – that is similar to the argument you made when we were reading Mill," etc.). The randomized assignments of the groups would allow for sustained interaction in which it would be incredibly difficult *not* to engage with diverse points of view.

In thinking about the name, I had some trouble. Socratic Clubs, Symposia, or the like sounded too extra-curricular. "Think tank," popped out to me because it seemed to describe literally what was expected of this group: a team of thinkers put together to research certain problems. Of course, the fact that none of the research would be applied in advocating to a state on certain policy positions or legal points made the fit imperfect for a purely academic setting. However, according to Soll (2017) the origin of our modern think tanks is not too far from a learned small group working collaboratively on intellectual puzzles: "While the term 'think tank' is modern, it can be traced to the humanist academies and scholarly networks of the 16th and 17th centuries. [...] Pierre Richelet's *Dictionary* definition of 1686 describes an academy only as a 'place where persons of letters, or of certain arts, assemble, to speak about letters, or their art."^{xviii} Such an assemblage or academy is what I was trying to recreate in the modern context.

For better or worse, I immediately took a liking to the term and thought it innocuous to roll with it.^{xix} Students found the idea intriguing and I've become convinced that it is not far enough off the mark to warrant changing it. However, what's in a name? The form of the philosophical think tank is what matters and it can always be employed without a catchy moniker if it distracts. At base it is a learning cohort that should be Socratic in spirit.

3. The Mechanics of a Philosophical Think Tank

Before turning to the results, I'd like to go into a little more detail as to how the think tanks look in practice.

I've now used Philosophical Think Tanks with success in three courses. Two were at Johns Hopkins University, one a full spring semester and the other a shortened winter term. Both of these classes were small seminars in small seminar rooms with a single long table. The semester-long course had 10 students, while the winter term course had 19. The third was at Towson University for a whole spring semester with 32 students. The room in which this course was held was larger and set up with nine separate tables that could seat approximately six to nine students. All told, then, I have so far facilitated philosophical think tanks with 61 students in diverse settings.^{sx} I will now try to fill in the picture as to how the form took shape in the three classes that have worked with it. I focus on the process of creating the groups and then on concrete examples of the sort of work that I had the groups undertake to overcome the two problems discussed above.

3.1. Forming the Groups

Though very distinct in terms of numbers of students, facilities, and seminar formats, the philosophical think tank formation was similar in all three cases.

At Johns Hopkins, for the semester-long course with 10 students, I divided the class into two think tanks of five students each. With the winter term course, I divided up the 19 students into four think tanks: three with five students and the last with four. Since both took place in small rooms around a single seminar-style table, I had the think tanks begin in circle shaped formations at the four corners of the room. At Towson University, I divided the 32 students into four groups of five students and two groups of six. Because

the room was already set up with many islands of tables, it was easy to have the think tanks find their place within the natural topography of the classroom. Even if one were in a lecture hall with fixed seats, I think one could easily form the groups by having them sit together with half the group in one row and the other half in the row below. When it came time to discuss, the lower row could simply turn around. For parity's sake, the groups could switch each class between who sits above and who sits below.

I used an online randomizing tool to select the groups. I would only interfere to make sure that there was roughly an equal representation of men and women in the groups. Also, if I noticed that a group seemed to have randomly put together many people who just so happened to be close friends or members of a fraternity or sports team (which one can often tell after one or two class sessions), I would swap one or two to ensure that no group had any obvious cliques. In the case of attrition, which only happened in the course at Towson, I moved one or two students from the original larger groups to ensure that there was a critical mass in each think tank.

In all three cases, I could tell that some ended up with friends and some with a group of complete strangers. At no point was there ever a case of an argument or fight that arose from this randomized mixing of students together. With the winter term course at Johns Hopkins, the groups remained for the duration of the term. For both semester-long courses at Johns Hopkins and Towson respectively, I rearranged the groups halfway through the semester because I had the sense that the energy drop that inevitably comes sometime around the time of midterms might be overcome with some fresh faces. Most importantly, in all three classes, I could tell that the groups quickly became comfortable with each other due to a growing familiarity. As Major, Harris, and Zakrajsek (2015) discuss in their fourth finding on class discussions as a means of learning: "Comfort with

discussion and class community improves the level of student learning," and "comfort develops from knowing one another and being in a classroom where a sense of community has been established."^{xxi} As a result of the think tanks, I had the impression that these classes developed much more quickly a sense of community or camaraderie in comparison with courses lacking this method. Of course, this is an anecdotal observation and would present an interesting topic for a more in-depth, comparative empirical study.

3.2. Think Tanks in Action

In lieu of an exhaustive list of examples, I will provide a concrete case in complete detail of how I have employed the think tanks to facilitate an ongoing conversation in a single unit. At the end, I list a few other concrete examples but don't go into detail.

In my semester-long course at Johns Hopkins, I had the think tanks take on the issue of CRISPR gene editing technology in one unit of the course. I designed the unit to last two weeks for a total of four one hour fifteen minute class sessions. The students read articles on the technology itself and its ethical implications before coming to class. To ensure they did the appropriate preparation, they were required to fill out reading reflections that I graded. I also covered in brief mini-lectures central points from the material to make sure we were all on the same page.

As for think tank work, in Session 1 they had to reflect on the possible dangers and advantages that the technology offers human development based on their readings. At the end of class, we discussed collectively and the think tanks shared their results with the rest of the class. The aim of this class period was to have each think tank perform a brainstorm to get on the same page about what they thought were the pros and cons of the technology. We ended class with an open reflection about whether people found it ethically problematic or permissible. As a takeaway, each individual had to make explicit what he or she thought about the ethical status of the practice based on this initial analysis.

In Session 2, each think tank had to create an argument for why CRISPR is wrong in principle regardless of whether they personally thought this way. After completing the argument – which they had to write down in numbered premises leading to a conclusion – each think tank delivered their argument to the other think tank(s). The think tanks then spent time working out how they would argue against or try to reject the arguments from their peer think tank. At the end of class we came together to have the think tanks offer their replies.

Session 3 took the same shape as Session 2. However, rather than arguing for why CRISPR is wrong in principle, they were tasked with coming up with arguments for why it is not necessarily wrong in principle but might be wrong for all the ways it could be practiced. Then, as before, the think tanks traded their arguments. The finale of class again consisted in each think tank replying to the arguments made by their peers.

Finally, in Session 4, each think tank came to class with the task of having reflected on how one might effectively guide the practice of CRISPR technology in society. When they arrived, I asked each think tank to imagine that they were a federal committee formed to develop principles regulating and limiting the uses of CRISPR technology. They were to come up with laws or guidelines to protect society on the assumption that – with the genie out of the bottle – one must take pragmatic steps to live with it.

For each session, I told them at the beginning of class that I would collect what they came up with as a group to motivate them to take it seriously, though I never ended up grading what they turned in (but one could easily do so to counteract a lack of commitment by the students). I was also fortunate that this class was motivated enough not to need the extra push. The arguments and ideas that they generated in their think tanks were impressive. Over the four classes, they essentially lived a Socratic dialogue in which the topic was introduced (Session 1); a deontological framework was approached and debated (Session 2); a consequentialist framework was created and evaluated (Session 3); and, finally, a pragmatic approach was developed (Session 4). Because the groups did not change between classes and they were creating shared documents that I returned to them, each session represented a continuing discussion of a major topic in bioethics from multiple vantage points, with a significant portion of the time spent in their think tanks.

While not always best friends with one another, students in this class were able to really get to know how each member thought. They came to think collaboratively through problems of ethical evaluation and then defend their claims or arguments collectively. Far from otiose, I believe the think tank created a quasi team spirit that persisted throughout the whole unit. Together they moved through various levels of evaluating a common problem that required serious analytical thinking. This way, they could compare how new arguments related to what came before.^{xxii} At the end, I had everyone reflect on where they initially stood vis-à-vis the practice (end of Session 1) and what they thought now after applying various ethical lenses to the topic (end of Session 4).

What I liked about this unit was how it allowed the think tanks to practice many different types of group discussion activity within one evolving dialogue about the ethics of gene editing. In terms of types of group discussions, Major, Harris, and Zakrajsek (2015) note four different functions it might serve. Although I discovered their work after having taught this unit, I think the functions they illustrate all synthesized quite well in the unit's form. The first type is "informational," in which the small group is tasked to "share information and assist one another" to "create a community of learners where ideas may be challenged but not attacked.²⁵⁵⁵⁰⁰ Session 1 provided such a function in which they collected and shared information. The second function is "problematical" in which the instructor poses a problem and groups must "consider the information or values needed to address a presented issue intelligently.²⁷⁵⁵⁰ The third is "dialectical," where the groups must "state opponents' views accurately and sympathetically.²⁷⁵⁵⁰ Both of these came to pass when the think tanks created their own arguments in response to a problem, as well as evaluated the arguments of the other think tank in Sessions 2 and 3. Further, since they were forced to create arguments against the practice, in many cases they were tasked with a dialectical task if they personally found the practice morally permissible or, indeed, good. Finally, the "reflexive" function is to discuss "what was learned in their own discussion groups in order to learn from the process.²⁷⁵⁵⁰¹ By beginning and ending with a reflection on where one stands in Sessions 1 and 4, we were able to create a space for reflection on what was learned from actually going through the process of forming clear arguments for and against the practice via multiple ethical frameworks.

While no two units were exactly alike in any of the three courses where I used think tanks, I undertook other similar projects. At Towson, each think tank at one point in the semester had to represent a side in a debate for which they were given extra credit points if they won.^{xxvii} Leading up to the debates – while the other think tanks were assigned separate prompts – the think tanks arguing a side at an upcoming debate had to prepare their arguments and practice thinking through how the other side might argue. Since variety is the spice of life, I also had the think tanks work on projects that were similarly longitudinal but not having to do with arguments per se or debates. For example, in my winter term class at Johns Hopkins in which we analyzed Karl Jaspers' political philosophy on individual and collective guilt, I had each think tank create a report on one of the four

species of guilt that Jaspers discusses. During the next course, we collated the four types and created a table on the blackboard as a visual model in which each think tank provided their portion of the analysis. I then tasked the think tanks with checking and conferring as to whether they thought each portion of analysis was accurate. And, before a midterm at Towson, each of the think tanks formed a team in a game of Philosophical Jeopardy, and could consult and ring in to a number of questions that I created as a content review.

4. Results, Questions, and Future Developments

I have been very impressed with the results of this method and find that students have valued it as well. In this concluding section, I would like to first present some initial evidence for the effectiveness of philosophical think tanks in addressing the two problems and then turn to a discussion of how one might develop it further. As for the evidence, I begin with my own impressions, then present anonymous qualitative and quantitative feedback.

4.1. Observations on the Effectiveness

My own observations have been the following: Time is immediately saved because the small groups need no management once they've been established. Students arrive and remain in their small groups for each class and for the whole semester (or a half, when they can be rearranged). The vast majority of think tanks have provided at least close to what I envisioned achieving. Students have time to revisit and remember old topics, come to understand different perspectives, and engage in a (more) continuous manner throughout the semester. While listening to their discussions, I've heard students referring back to older disagreements, conclusions, and topics to inform their continuing discussions. And

I've heard them sometimes backtrack to previous topics inspired by some new connection in the material at hand. Rather than a distraction, I see this as precisely what should happen in a small group, namely, a freedom to follow the line of reasoning and *finish* reasoning on the topic that remained up in the air – a case of active learning by intentional learners.

4.2. Qualitative Feedback

As for qualitative feedback, I have received numerous comments through anonymous student evaluations that provide some evidence that the method impressed students enough to warrant mention. I should also note that I have not yet received in person or in an anonymous evaluation a single negative comment about the think tanks. On the contrary, the think tanks when mentioned have always been mentioned in a glowing light. I include here 3 samples from anonymous student comments:

> A: "This is an amazingly organized course. We are grouped up into our 'philosophical think tanks' early in the class, a group of 3 or 4 students also in the class. We're encouraged to get to know each other and memorize each other's names and what we're like. It works – I've never actually enjoyed group work this much before. [...] Instead of our discussions being fumbling around in the dark, we are given a direction to share our thoughts in. In the latter half of the class all of the small think tanks get together and start talking about what they've discussed, and we work out our 'philosophical knots' together."

> B: "In class, we spent a lot of time in 'Think Tanks,' small groups where we talked over the more difficult concepts. Once we ran through the important details once in small groups, the class would come together as a whole to talk about what each group came up with. This was a great way to get a variety of viewpoints in

> > 21

discussion. Alex said at the very beginning that he hoped our class would become a sort of symposium - and it did."

C: "The 'think tanks' were very useful and it was fun getting to know the other students in the class."

These comments suggest that some students found the Lack of Continuity and Lack of Other Problems avoided even though they were unaware that these were the problems I sought to fix.

While no comment offers direct evidence that transfer actually occurred, Comment A's reference to the conversations having "direction" and not "fumbling around in the dark," points to a sense in which the think tanks allowed students to remain on track and focused without arbitrary interruption. Also Comment B's remark that I "hoped our class would become a sort of symposium – and it did," suggests to me that the think tanks allowed an atmosphere of community to take root that connected each class better with previous and subsequent meetings. While not an anonymous comment, I recently communicated with a former student who was taking my survey and she wrote:

In general, I think the best part of the think tank was the ability to create relationships with other members of our class through more in-depth conversations of what they all individually felt/thought. [...] I really enjoyed getting to know the ways in which other people formulated their thoughts and how they related to the material over time.

The possibility of "more in-depth conversations" and ability to get to know how people thought on the material "over time," suggest to me that a sense of continuity is created by this method, which is otherwise lacking.

Moreover, Comments A and C (above) indicate that students found the think tanks effective conduits to meet and engage with new individuals. Commenter A's description of the set-up, namely, "We're encouraged to get to know each other and memorize each other's names and what we're like. It works – I've never actually enjoyed group work this much before," points to an appreciation of the opportunity to remain in a group with people all of whom one did not know beforehand. Commenter C makes explicit that s/he greatly appreciated the opportunity to make new acquaintances. And as noted, I've not yet received a negative comment in which a student complained about having to engage with new people.

Another affirming result came as a surprise from a student evaluation *not* of me and my course, but of a colleague of mine for a course that he taught without think tanks. In the section of his evaluation asking the students' opinions on what could most improve his class, he shared with me that one student wrote: "Possibly groups like Alex's 'think tank' structure." The philosophical think tank must have left a very positive impression on this former student who missed it in classes without the set up.

4.3. Quantitative Feedback

To assess how students felt about the effectiveness and implementation of philosophical think tanks, I have begun to gather and analyze data through an online survey (Google Forms) and show the results in Fig. 1. The survey contained four prompts that sought to evaluate three things: (1) the overall positive or negative impression the think tank method left on my students; (2) whether the method indeed helped address the Lack of Continuity Problem by allowing a transfer of information between units and themes of the course; and (3) whether it indeed allowed students to engage better with diverse points of view. After distribution of the survey to students who have experienced philosophical think tank group work, 28 of the 61 responded (46% of all participants so far). Obviously, this number of respondents is low and further data collection would be required to substantiate the method's utility quantitatively. I offer these data as only an initial sample of empirical

evidence. Here, there is clearly room for more robust studies and comparative analyses. xxviii

The survey was anonymous and consisted of four responses that asked the student to provide a Score corresponding to the degree to which they agreed or disagreed with a statement: 1 ="Strongly disagree" and 5 ="Strongly agree," with 3 ="Neither agree nor disagree." The four statements were:

1. Overall I found the think tank form of small group an effective learning tool.

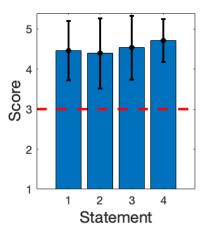
2. Working in a think tank helped us connect our discussions with previous class discussions.

3. I felt more exposed to other students' points of view with whom I don't normally associate thanks to the think tank formation.

4. I would recommend the think tank form of small group to other instructors.

Obviously, Statement 2 is aimed at measuring whether the Lack of Continuity Problem has been addressed from the student's point of view, and Statement 3 at measuring the same for the Lack of Other Problem. Together, Statements 1 and 4 seek to elicit a response as to the overall impression that the method left on students. The "overall effectiveness" Statement 1 is meant to get a more explicit response about their general impression, while the "would you recommend" Statement 4 assumes that if someone wants to see other instructors implement it, then one thinks implicitly it is a practice worth keeping.

Fig. 1



The results from each question were very encouraging with the mean of each Score well above the "Neither agree nor disagree" mark (shown as a dashed line, Fig. 1). I also show the standard deviation for each of the statements in Fig. 1, suggesting a very statistically significant response relative to the "Neither agree nor disagree" Score (given the sample size of N=28). The mean Scores were as follows:

Table 1

Prompt	Mean Score
Statement 1 – Overall Effectiveness	4.46
Statement 2 – Continuity Statement	4.39
Statement 3 – Other Statement	4.53
Statement 4 – Worthy of Recommendation	4.71

These mean Scores show that the majority of students agreed – and tended to agree strongly (the median Score for every statement was "5 – Strongly agree") – that think tanks provided an effective method in all four categories. In particular, the most agreement occurred in relation to Statement 4. Though Statements 2 and 3 received a wider variance of responses, they nevertheless suggest that a majority of students agreed that think tanks promoted transfer and exposure to other points of view than traditional small group discussions.^{xxix}

These results - taken together with the qualitative evidence - suggest that students

found the method beneficial and demonstrate the effectiveness of the approach as a whole. In particular, the fact that 75% of all respondents (21 students) "strongly agreed" with Statement 4 that the method should be recommended to other instructors, with 21% (6 students) "agreeing" and only 4% (just 1 student) remaining neutral with "neither agree nor disagree," point to its high approval by students who have tested it from different institutions and in varied curricular contexts.

4.4. Questions and Room for Improvement

I would like to end by addressing certain questions and concerns one might have, as well as pointing to areas where I want to see further development.

I think that one immediate concern is whether or not the longitudinal small group with zero self-selection risks trapping students in toxic or hostile small groups for half or for an entire semester. That is, there is a potential *other* problem of the Lack of Other Problem, namely, the unbearable other. Such a question at least troubled me at first as well. In order to address this, I always made a note that the think tanks might change somewhere around the midpoint of the semester to allow for exchange with different perspectives. I also encouraged those with concerns to talk with me outside of class in case any such issues came up. When I have remixed the think tanks halfway through the semester, my reason was an imbalance I noticed in some of the groups or a sense that it could alleviate possible boredom and rejuvenate the energy level after the mid-semester slump. The students didn't seem to mind. In fact, many, I think appreciated the change. And by then there was enough of a class community that the new think tanks were not starting off at any disadvantage of extreme shyness. Thus, this option should, I think, always stand at the ready; whether and when remains up to the instructor. I'm yet to encounter a think tank where there was clearly a toxic environment. In fact, with groups of four to six students, I've found that there is almost always a balancing out in which no one ever feels completely isolated or unsupported. And there is enough of a group presence to curb individual bad actors from bullying or other sorts of bad behavior.

Another concern might be whether the Lack of Continuity Problem is actually solved: Does this method truly provide the sort of constancy that I sought to replicate from the Socratic paradigm? As someone who has experienced and taught courses both ways, I personally have found that the think tanks do allow for a better close, community-oriented approach in contrast to randomly assigned or self-selecting small groups that are reshuffled each class. The qualitative feedback indicates as much, as well as the quantitative results to Statement 2 where 61% of all who responded "strongly agreed" and 25% "agreed" that they were aided in connecting information between classes because of the practice. Only one person responded with a "disagree" and four remained neutral. Thus, from the student's perspective – 86% of all who took part in the survey – it does seem that philosophical think tanks provided more continuity between classes. Of course, each time the think tanks reconvene, there has been a break but such an interruption is more akin to a pause than a break since the group that reconvenes is the same and the previous discussions remain shared amongst the group.

Even if the Lack of Continuity Problem were not viewed as resolved, I will say that the time saved by not needing to remake the small groups at every juncture increases class time and, ergo, creates more time for real learning. Furthermore, it follows that one also need not worry about the small groups needing to ease into real discussion after the inevitably clunky ice breaking phase of any new group formation. Time is saved no matter how one looks at it, which opens up the possibility of better using that time.

Ultimately, the Lack of Continuity Problem is the tougher of the two problems to solve because of the common structure of modern semesters and class times as such. If we truly want to learn together about something as a team and we are not limited by an externally determined framework, then there is little sense in allotting time to our efforts as is done in the current model of credited academic courses. The modern form of the academic semester is by its very structure interruptive and staccato in nature. Better ways of addressing the Lack of Continuity problem might call for more creative formats of scheduling class time. For example, in Germany certain credited courses - "block seminars" (Blockseminare) – don't take place at regular intervals throughout the week, but instead take place on two weekends that everyone plans for in advance. On these weekends, classes meet for entire days thereby reaching the number of required hours for course credit but in a more concentrated timeframe. Within the regularly dispersed class times of our standard semesters in the United States, however, I think that think tanks are our best hope to help give students a more interconnected learning experience. It goes without saying, of course, that think tanks would be valuable in more concentrated frameworks as well when the class size is medium to large.

To conclude, I'd like to finish by pointing to ideas that I've had for future development of philosophical think tanks. In line with the sorts of active learning put forward by Fink, I would like to experiment with philosophical think tank projects. That is, I would like to develop longitudinal projects that the think tanks work on for the entirety of the semester as is often found in examples of active learning from other disciplines.^{xxx} The question is: What project would work best? Here, the Socratic dialogue model I find fails to offer any immediate guidance. Socrates and his interlocutors are never concerned with working on a project that will result in a group grade.

In terms of writing, one could consider having them work collaboratively on a coauthored paper. Such a paper with multiple authors is certainly something done by real philosophers and could even be encouraged as something that might be submitted to an undergraduate journal for passing the class (of course, with no conditions on its being accepted). While I've done this sort of project with advanced students individually, I've yet to experiment with it in a group setting. Another sort of project, one could consider is a sort of conceptual organization project in which students need to create, as recommended by Ambrose et al. (2010) a concept map in which they create a living document that they rework throughout the course of the class. This would charge the groups with keeping track of the "big picture' that presents the key concepts of topics in [the] course and highlights their interrelationships."^{xxxi} In this way, they would gain deeper insight into the conceptual layout underlying the course that requires active engagement within the group and with the material of the course as a whole.

I'm sure that there are many directions that could be tried with philosophical think tanks. I continue to find inspiration from Plato's descriptions of philosophy as a means of coming to know oneself through the other. The small group discussion I think is one of the best ways that we – as philosophy instructors – can come to replicate this process. The philosophical think tank while in its nascence can help make the classroom a more vibrant philosophical community.

*

References

Ambrose, Susan A., Michael W. Bridges, Michele DiPietro, Marsha C. Lovett, and Marie K. Norman. How Learning Works: 7 Research-Based Principles for Smart Teaching. San Francisco, CA: Jossey-Bass, 2010.

- Bradbury, Neil A. "Attention span during lectures: 8 seconds, 10 minutes, or more?" *Advances in Physiology Education* 40:4 (November 8, 2016): 509-513.
- Bransford, John D., Ann L. Brown, and Rodney R. Cocking, editors. How People Learn: Brain, Mind, Experience, and School: Expanded Edition. Washington D.C.: National Academy Press, 2000.

Brookfield, Stephen D. and Stephen Preskill. *Discussion as a Way of Teaching: Tools and Techniques for Democratic Classrooms*. San Francisco, CA: Jossey-Bass, 2005.

- Cholbi, Michael. "Intentional Learning as a Model for Philosophical Pedagogy." *Teaching Philosophy* 30:1 (March 2007): 35-58.
- Cohen, Elizabeth G. "Restructuring the Classroom: Conditions for Productive Small Groups." Review of Educational Research, 64:1 (Spring 1994): 1-35.
- Fink, L. Dee. Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses. San Francisco, CA: Jossey-Bass, 2013.
- Immerwahr, John. "The Hobbes Game." Teaching Philosophy, 1:4 (Fall 1976): 435-439.
- Kolar, Randall L., Kanthasamy K. Muraleetharam, Michael A. Mooney, and Baxter E. Vieux. "Sooner City – Design Across the Curriculum." *Journal of Engineering and Education*, 89:1 (January 2, 2013): 79-87.
- Major, Claire Howell, Michael S. Harris, and Todd Zakrajsek. *Teaching for Learning: 101 Intentionally Designed Education Activities to Put Students on the Path to Success.* New York: Routledge, 2015.
- Mill, John Stuart. On Liberty and Other Writings. Cambridge: Cambridge University Press.
- Nilson, Linda B. Teaching at Its Best: A Research-Based Resource for Collegiate Instructors. San Francisco: Jossey-Bass, 2010.
- Noddings, Nel. "Theoretical and Practical Concerns with Small Groups in Mathematics." *Elementary School Journal* 89 (1989): 607-623.
- Soll, Jacob. "How Think Tanks Became the Engine of Royal Propaganda." In *Tablet*, January 31, 2017. https://www.tabletmag.com/jewish-news-andpolitics/222421/think-tanks-jacob-soll-propaganda.
- Plato. Protagoras. In Plato: The Collected Dialogues. Edited by Edith Hamilton and Huntington Cairns. Princeton: Princeton University Press, 1961.
- Pollock, Philip H., Kerstin Hamann, & Bruce M. Wilson. "Learning through Discussions: Comparing Benefits of Small-group and Large Class Setting." *Journal of Political Science Education* 7:1(2011): 48-64.

Vygotsky, Lev S. Mind in Society: The Development of Higher Psychological Processes. Cambridge, MA: Harvard University Press, 1978.

Wilson, Karen and James H. Korn. "Attention During Lectures: Beyond Ten Minutes." *Teaching of Psychology* 34:2 (December 5, 2007): 85-89.

Endnotes

I would like to first recognize all the students at Johns Hopkins University and Towson University who attended the courses in which I experimented with philosophical think tanks. Their openness to tinkering with small group discussion dynamics and their feedback were invaluable to the development of my method. Also, I want to thank the anonymous peer reviewers from *Teaching Philosophy* for their comments and suggestions that improved the final version. Finally, I am extremely grateful for the efforts of both Mavis Biss and Christopher H. Bohrer. They provided key insights and guidance that helped prepare this paper for publication.

¹ Plato, *Protagoras*, 335b-336b. Whether listening to long lectures is indeed effective is seriously debated in relation to attention spans of students. See, for example, Bradbury, "Attention Span," and Wilson and Korn, "Attention During Lecutres."

ⁱⁱ See Cohen, "Restructuring the Classroom," and Major, Harris, and Zakrajsek, *Teaching for Learning*, for surveys of the literature pointing to the gains made in perceived and actual learning outcomes by students in group work. Of course, the paradigm of Socratic dialogue as an open, free, and communal space is not always on display in Plato's dialogues where Socrates often plays a pugnacious gadfly who clearly thinks he is the smartest guy in the room. Be that as it may, the Socratic form remains invaluable to this day.

ⁱⁱⁱ Fink, Significant Learning Experiences, 117.

^{iv} Fink's examples of general forms of experiential learning include: "debates," "role playing," "simulations," "dramatizations," "service learning," "situational observations," and "authentic projects" (Fink, *Significant Learning Experiences*, 123). With debates, philosophers are well acquainted. The next three seem to me (in a majority of the cases) non-apt. One notable exception is simulations. I have played the Hobbes Game, developed by John Immerwahr ("The Hobbes Game," 1976), many times when introducing students to *Leviathan*. It is a wonderful way of bringing students to think through key concepts of Hobbes' political philosophy by "doing" before they complete the reading. I'm sure that there is an untapped potential for simulations in the philosophy classroom, but have not had any inspiration that creates something both as simple and as fun as Immerwahr's game. Service learning, while perhaps quintessential to an ethically flourishing life, does not seem right when planning a course on metaphysics or early modern philosophy.

^v Cholbi, "Intentional Learning," 36. This is also sometimes referred to as "metacognition," which involves learning the same skills of self-assessment, planning, and self-direction as opposed to learning content (see Ambrose et al., *How Learning Works*, in particular Chapter 7, pp. 190ff.).

vi Cholbi, "Intentional Learning," 41.

vii Cholbi, "Intentional Learning," 43.

viii Ibid.

^{ix} Nilson, *Teaching at Its Best*, 127. See also Major, Harris, and Zakrajsek, *Teaching for Learning*, Chapter 2, for examples of implementing small group discussions that effectively

32

avoid such free-association forms, yet avoid the other extreme of instructor-dominated discussions.

^x I don't mean, of course, that students carry no responsibility for the success of a discussion. They certainly do. And, unfortunately, certain students will simply fail to care about the issues presented in class or find it pointless to think about them. Such individuals pose a problem for even the best-planned discussions from which it follows that one cannot always blame the instructor for a failed small group discussion. I think my method could actually help ameliorate this issue by diluting such attitudes in groups of students who are not similarly minded.

xi Mill, On Liberty, 37.

^{xii} It might seem that switching randomized groups from class to class would automatically solve the Lack of Other Problem. While this would be one way to go, I think that it ultimately aggravates the Lack of Continuity Problem and is an inefficient solution. It would require restarting and rearranging each discussion period with new group assignments. Also, it means that (for at least the first portion of the semester) students will need to break the ice in a new group setting, which means less time actually discussing. ^{xiii} Brookfield and Preskill, "*Discussion as a Way of Teaching*," 21-22.

^{xiv} Major, Harris, and Zakrajsek, *Teaching for Learning*, 45-46, provide an exhaustive analysis of the varieties of group discussion that can take place. They cover "by size" (whole class, small group, dyads); "by function" (informational, problematical, dialectical, and reflexive); "by level of structure" (spontaneous discussion and planned discussion); and, finally, "by environment" (face-to-face or online). Their analysis presupposes that discussions remain localized within one single class period. My suggestion adds two dimensions to the types of the traditional small group that one might call "by duration" (lasting one class, multiple classes, or extending for the semester) and "by genesis" (self-formed or instructor-formed). ^{xv} Bransford et al., *How People Learn*, 51.

^{xvi} See Pollock, Hamann, & Wilson, "Learning through Discussions," and Cohen, "Restructuring the Classroom," for accounts of the manner that small group discussion can increase participation by participants coming from diverse backgrounds.

^{xvii} A possible point of worry – which I address in the next section – reasonably arises here, namely, that it might be unwise to trap people together who despise, annoy, etc. each other. ^{xviii} Soll, "How Think Tanks Became the Engine of Royal Propaganda."

^{xix} Since I've begun using think tanks, only one colleague has complained about the use of the term "think tank." The reason was, according to her, that it was too imperfect of an analogy to describe what I was doing.

^{xx} The fact that Johns Hopkins and Towson present two very different institutions indicates to me that philosophical think tanks can work well regardless of setting. Of course, they are not a panacea and do not automatically ensure that Socratic dialogue will occur. All the other tools at the instructor's disposal must be employed to ensure that students are reading and grasping the material at hand.

xxi Major, Harris, and Zakrajsek, Teaching for Learning, 52.

^{xxii} As Cohen argues in her survey on collaborative learning, the sort of productivity that I find important in philosophical think tanks deals with higher-order thinking in the spirit going back perhaps to Dewey and Vygotsky and crucial at all levels of education: "Productivity can also be defined in terms of conceptual learning and higher order thinking. Some researchers advocate small groups because they believe that small-group processes contribute to the development of higher order thinking skills (Noddings, "Theoretical and Practical Concerns"). Noddings sees this school of thought as originating in the work of Dewey and the social constructivism of Vygotsky's *Mind in Society*: "Because these researchers assume that such outcomes cannot be achieved without the creation of suitable discourse or conversation within the small groups or without a process of discovery, they define productive small groups as those that are engaged in high-level discourse. This alternative definition of productivity stresses conceptual learning and higher order thinking" ("Restructuring the Classroom," 3).

xxiii Major, Harris, and Zakrajsek, Teaching for Learning, 46.

^{xxiv} Ibid.

^{xxv} Ibid.

^{xxvi} Ibid.

^{xxvii} To win, the think tanks had to get a majority of votes from the rest of the class, which acted as the jury.

^{xxviii} These data represent only a start because the method is relatively new and still in development. An anonymous reviewer suggested quite rightly that a more robust empirical study would benefit from a point of comparison in which reactions to more traditional methods of small group discussion are evaluated by students through a similar feedback tool. I agree and welcome others to enter the fray when it comes to testing it in comparison with other ways of conducting small group work. For now, this study aims at describing and motivating the employment of a new form of small group discussion, as opposed to a full-on empirical justification of it. xxix Of all respondents, only two gave "2 – disagree" responses. One respondent responded to Statement 2 with "disagree" and a different respondent responded to Statement 3 with "disagree." Other than these two Scores, no one else gave a Score lower than 3 to any Statement. Interestingly, the respondent who disagreed with Statement 2, gave a Score of 5 to Statement 3. Thus, while perhaps disagreeing with the statement that it helps transfer, s/he strongly endorsed the statement that it helped her/him connect with other points of view. For the other respondent, the reverse was the case. While disagreeing that it helped him/her better engage with other points of view, s/he gave a Score of 4 to Statement 2, thus agreeing that it led to better transfer. Both respondents, in turn, agreed that it was worth recommending further.

^{xxx} One such example of an authentic project that has brought students to actually do that which they learn about doing is an engineering project at University of Oklahoma called, "Sooner City" (Kolar et al., "Sooner City"). The engineering students spend each year designing pieces of a simulated city that they must expand on in the subsequent years of their education. This requires that they integrate new designs and projects in a layout in which their former projects continue to exist. Thus, they are able to get a feel for what it is actually like to be an engineer. Another example for business majors is a project that required them to actually start a business over the course of their studies – again, giving them first-hand experience of what it is like to actually do business (Fink, *Significant Learning Experiences*, 124-125).

xxxi Ambrose et al., How Learning Works, 59-65.

Alexander T. Englert is a postdoctoral research associate in philosophy and religion at Princeton University's Center for Human Values. Currently, his research focuses on Kant and the German Idealist tradition, as well as contemporary questions about the function of ideals in ethics and moral psychology. He teaches on topics in ethics, religion, and the history of philosophy. Princeton University, Center for Human Values, 5 Ivy Lane, Room 215, Princeton, New Jersey 08544; aenglert@princeton.edu.